# **Tab 3: Project Financing**

#### 3-a. ESTIMATED COST

Provide a preliminary estimate and estimating methodology of the cost of the work by phase and/or segment (e.g., planning, design, construction).

Fluor Daniel is proposing to develop, design, and construct the Capital Beltway HOT-Lane project for a fixed price and deliver it on a date-certain schedule under a comprehensive agreement similar to that used on Route 895. Our current conceptual cost estimate for this project is \$630 million. Fluor Daniel is offering two unpriced options for fulfilling VDOT's operational and maintenance responsibilities, one for the toll system and a second for the total facility asset management. This conceptual price includes the project as described in 2-a and assumes directional ramp connections will be provided at the Dulles Toll Road and I-66 Interchanges only. Other intermediate access points will be provided by breaks in the buffer that separates the HOT lanes from the general-purpose lanes. This price assumes a completion date of August 1, 2008.

### **Conceptual Estimated Costs**

Grading	\$60,000,000
Paving	105,000,000
Retaining Walls	60,000,000
Structures	210,000,000
Miscellaneous	85,000,000
Toll Systems	15,000,000
Design/QC/Program Management	95,000,000
Total	\$630,000,000

# Optional Additional Direct Ramp Access Costs (Not included in Fluor Daniel Price)

The intermediate access points, not served by direct ramp access under the Fluor Daniel conceptual price, could be added in a later phase as state funding permits. Fluor Daniel anticipated the need for such additional ramps and accommodated them in the conceptual design plans. If additional funding is identified during the negotiation phase, any or all of these ramps could be included by increasing the conceptual cost estimate by the following amounts:

Braddock Road Interchange	\$28,000,000
Route 50 (Arlington Blvd.)	24,000,000
Interchange	
Route 123 (Chain Bridge Road)	24,000,000



**Tab 3: Project Financing** 3-a Estimated Cost

The above costs do not include any right-of-way or utilities since Fluor Daniel feels there is the potential for avoiding displacement and property taking at most if not all locations. This aspect will be studied in detail as part of the detailed proposal preparation.

During the comprehensive agreement negotiations between VDOT and Fluor Daniel, changes to the conceptual/preliminary configurations desired by VDOT can be incorporated into the project scope and cost.

Fluor Daniel welcomes the opportunity to discuss the basis of our conceptual estimate and schedule with VDOT.

#### 3-b. DEVELOPMENT OF THE PLAN OF FINANCE

Submit a plan for the development, financing and operation of the project, showing the anticipated schedule on which funds will be required; and proposed sources and uses for such funds.

The Fluor Daniel team will work very closely with VDOT and Fairfax County to develop and implement a cost-effective financing strategy for the proposed Capital Beltway HOT Lanes. By taking advantage of the significant expertise and resources available in the private sector, we will create a capital structure for the project that allows tolls to be maintained at the levels appropriate to the identified policy objectives while maximizing the return on any public-sector investment that may be required.

Based upon the preliminary traffic and revenue analysis prepared by Vollmer Associates LP, Bear Stearns has developed a preliminary plan of finance that relies upon a capital markets toll revenue bond issuance, a loan from USDOT under the TIFIA program, and a contribution from the governmental sponsors.

As a starting point for that effort, we have analyzed numerous configurations and tolling strategies for the project, including a 4-2-2-4 free-lane/HOT-lane configuration, a 3-2-2-3 configuration, and a 3-3-3-3 lane configuration. After extensive analysis and discussion, we believe that the optimal strategy, based on financial, operational, and policy considerations, is to build the project using a 4-2-2-4 configuration (see Tab 2-a). This approach ensures that the project will not be eliminating any current, toll-free capacity but will add 50 percent additional capacity.

# **Project Development**

Upon execution of a comprehensive agreement between VDOT and the Fluor Daniel team, we will mobilize the resources needed to develop a fixed construction price quote and guaranteed completion schedule. In addition, we will undertake the more detailed traffic and revenue analysis that is required to access the capital markets. The development effort should take approximately 8 months (see Tab 2-d), and we anticipate spending nearly \$5 million to complete the effort.

To expedite development of the project, we request that VDOT provide continued responsibility for completion of the environmental review process.

## **Financing**

For purposes of our conceptual plan of finance, we have assumed that tax-exempt toll revenue bonds would be issued in early 2004 to finance most of the cost of the project. Bond proceeds would also be used to capitalize interest during construction, to fund necessary reserves, and to pay associated legal and financing expenses. The Fluor Daniel team will work with VDOT to find or create an appropriate issuer for the project debt.

#### **Sources of Funds**

Senior Current Interest Bonds	\$269,115,000
Senior Capital Appreciation Bonds	104,062,094
Subordinated TIFIA Loan	120,836,744
Local Government Investment	177,140,000
Investment Earnings	92,958,088
Total Sources	\$764,111,926

#### **Uses of Funds**

Project Costs	\$630,000,000
Issuance Costs	9,329,427
Capitalized Interest	87,462,375
Debt Service Reserve Fund	37,317,709
Contingency/(Shortfall)	2,414
Total Uses	\$764,111,926

Fluor Daniel proposes to take responsibility for the capital markets debt issuance and take the lead in the negotiation of the TIFIA loan, seeking only VDOT's sponsorship as required by the relevant federal guidelines. The legal structure proposed will involve a private corporation that will serve as the statutory Operator under the PPTA. This corporation will have a Board that will represent the project and local government interests and will have the right to collect tolls on the facility. Fluor Daniel will investigate all applicable alternatives for issuance of the project debt, including having the private corporation issue the debt directly, in a manner similar to the role of the Pocahontas Parkway Association for the 895 project, and issuing through an appropriate local conduit, such as the Fairfax County Economic Development Authority. Fluor Daniel will work with the Department and the County to collectively choose the legal structure best suited to the project's and its objectives.

# **Operations**

Fluor Daniel proposes an arrangement similar to the Pocahontas Parkway Project, where VDOT will operate and maintain the facility after completion. This structure permits the gross pledge of toll revenues that has been assumed for the Plan of Finance, providing significantly greater capital markets debt capacity. Under this arrangement, VDOT retains the flexibility to operate the facility itself or arrange for a private operator under terms consistent with qualified management contract limitations placed by the Treasury on facilities financed with the proceeds of tax-exempt bonds.

Fluor Daniel has had discussions with VMS, Inc., regarding providing an up to 20-year asset management contract at the option of VDOT. VMS has committed to providing these services if desired by VDOT. Furthermore, Fluor Daniel will identify a qualified toll system operator to provide a maintenance management contract also at the option of VDOT. If the options are exercised, Fluor Daniel will provide a scope of services and price as part of the detailed proposal submission. Both contracts would be directly with VDOT.

The Fluor Daniel team will place considerable importance on designing the improvements in a manner that facilitates efficient operation and maintenance, and we will provide warranties and/or insurance to cover certain aspects of the design and construction work after completion.

Net project revenues available after payment of debt service are expected to be more than sufficient to cover anticipated operating costs and maintenance expenses.

#### 3-c. KEY ASSUMPTIONS OF FINANCIAL PLAN

Include a list and discussion of assumptions (user fees or toll rates, and usage of the facility) underlying all major elements of the plan.

Key assumptions used at this stage of project development include:

#### **Moderate Increases in Traffic and Toll Rates**

Vollmer Associates LP expects average weekday traffic on the Capital Beltway Express Lanes will range between 29,000 and 40,000 vehicles in 2005. Assumed annual growth in toll traffic following the ramp-up period of two years averages approximately 1 percent, an extremely conservative rate of growth that reflects the intention to maintain a free-flow of traffic on the express lanes by raising toll rates. Toll rates in the opening year range from \$1.00 (off-peak hours) to \$4.18 (peak hours). The effective annual increase in toll rates thereafter, primarily due to inflationary adjustments, averages less than 3.3 percent annually.

### **Gross Revenue Pledge**

The conceptual plan of finance assumes that investors are given a first lien on all toll revenue to maximize potential debt capacity. Though projected revenue available after payment of debt service is more than sufficient to cover assumed operating expenses, VDOT will need to commit to loan the project any funds needed to continue operations if for some reason toll revenues are not sufficient. The Virginia Department of Transportation provided a similar backstop on operations to facilitate the financing for the Route 895 project.

# 1.75x Minimum Debt Service Coverage

The debt service coverage required by rating agencies and credit enhancers for start-up toll facilities varies based on the amount of local economic growth needed to achieve the traffic projections, the anticipated toll elasticity of the users (sensitivity to toll rate increases), and liquidity considerations (funded reserves and provisions for capturing excess cash flow). For purposes of the conceptual plan of finance, we have assumed 1.75x minimum debt service coverage. Increasing the requirement by 0.25 (i.e., 2.00x) would decrease bond proceeds by approximately \$40 million, with a \$50 million increase in bond proceeds if the assumed minimum coverage ratio is lowered to 1.50x.

#### **Debt Sold Without Credit Enhancement**

The conceptual plan of finance assumes an average tax-exempt borrowing cost of approximately 6.65 percent. This assumption represents a slightly higher cost of borrowing that would be found currently, as the assumed timing for the capital markets issue raises the possibility that market rates may not be as favorable. It may be possible to obtain third-party credit enhancement, such as a municipal bond insurance, that would significantly reduce the effective borrowing cost and thereby increase the potential amount of bond proceeds. Potential increase in debt capacity could range between \$40 million and \$60 million depending on the cost of the credit enhancement and the resulting decrease in interest rates.

# **No Competing Facility**

To achieve investment grade credit ratings on the senior project debt, VDOT will have to agree not to add additional free lanes or other directly competing enhancements until the project debt is repaid or restructured to accommodate new capacity.

# **Public-Sector Investment to Close Any Funding Gap**

The tax-exempt market has been very receptive to start up toll projects and is a cost-effective way to secure construction financing. Because of IRS rules and regulations governing the issuance of tax-exempt bonds, however, accessing the municipal market precludes any direct equity investment in the project by private entities. Therefore, if sufficient tax-exempt debt cannot be raised to fully fund construction, we have to assume that appropriate public-sector investments would be secured to cover the shortfall. Potential funding options and strategies are discussed in Tab 3-e: Local, State, or Federal Resources.

# Additional assumptions include:

- Accessing the tax-exempt markets to achieve the lowest possible cost of capital.
- The Beltway will be widened to 12 lanes with the center 4 lanes operating as HOT lanes reserved for traffic that will pay tolls.
- Tolls will vary depending on the time of day and level of congestion. Initial maximum tolls would be \$4.18 for 2005 and \$5.62 for 2015. Initial off-peak tolls would be \$1.00 for 2005 and \$1.50 for 2015.
- Qualifying HOV (HOV-3 for the financial analysis) vehicles, public buses, and emergency vehicles will be able to access the HOT lanes for free.



- Tolls will be collected electronically using transponders (Smart Tags) only.
- Upon financial closing Fluor Daniel will receive a development success fee, which is included as part of the \$630 million conceptual cost estimate.
- VDOT will continue to process the environmental documents and record of decision.
- VDOT will provide any required assistance to obtain permits for project components in a timely manner.
- VDOT will operate and maintain all corridor improvements when completed.
- Fluor Daniel will provide construction inspection services overviewed by VDOT.
- VDOT will provide assistance in coordination with federal, state, and local agencies.
- No right-of-way or utilities have been included.
- VDOT must expressly confirm its acceptance of all VDOT responsibilities and obligations described in this proposal before accepting the conceptual price quoted by Fluor Daniel.
- Fluor Daniel's price is conditioned upon the use of the design-build delivery method and a comprehensive agreement acceptable to both parties will be executed.
- This proposal is valid for six months or for such further period as the parties may mutually agree.
- Fluor Daniel will provide a Payment and Performance Bond for 100 percent of the contract value. After Final Acceptance, the performance bond shall be reduced to 20 percent of the original amount thereof for the duration of the Fluor Daniel warrantee.
- Fluor Daniel provides a five-year warrantee on workmanship and materials.
- The HOT lanes will be posted for higher speed limits than the adjacent free lanes by at least 10 mph.

#### 3-d. **RISK FACTORS AND MITIGATION STRATEGIES**

Identify the proposed risk factors and methods for dealing with these factors.

Fluor Daniel has developed the plan of finance for the Capital Beltway HOT-Lane project based upon the tried and proven experience of our team on similar projects in Virginia, throughout the United States, and abroad. The project financing will be structured so that the principal risks associated with the transaction are allocated among the Fluor Daniel team, investors, and/or third parties that are compensated for taking risk, such as an insurance company.

Construction of Facility on Time and Under Budget - The Fluor Daniel team assumes all responsibility for delivering the project, with the exception of any necessary utility relocations and right-of-way acquisitions if any. These elements have been excluded for the purpose of pricing the conceptual proposal scope of work and can be added at a future date at the direction of the VDOT.

Traffic and Revenue Risk – Purchasers of the project debt and potential credit enhancers bear the risk that project revenues may not be sufficient to pay scheduled debt service. VDOT will have absolutely no financial obligation to those investors. Under current proposal though, VDOT would be required to provide funds to operate and maintain the facility if net project revenue is not sufficient. The risk of a payment, however, is minimized by structuring the project debt with significant coverage and by funding reserve and contingency accounts. Fluor Daniel will consider taking a risk position in the financial architecture of the transaction to mitigate revenue realization risk, as it did for the Pocahontas Parkway transaction.

# 3-e. LOCAL, STATE, OR FEDERAL RESOURCES

Identify any local, state, or federal resources that the proposer contemplates requesting for the project. Describe the total commitment (financial, services, property, etc.), if any, expected from governmental sources; and the timing of any anticipated financial commitment.

Based upon the initial construction estimates and the assumptions used in developing the capital market strategy outlined above, the Capital Beltway project is currently able to fund at least 50 percent of its costs through self-supporting, nonrecourse toll revenue debt. The Fluor Daniel team proposes to fund the remainder of the project costs through a subordinated loan from USDOT under the TIFIA program and from a direct contribution by the governmental sponsors of the project

#### **TIFIA Loan**

The Transportation Infrastructure Finance and Innovation Act (TIFIA) provides a mechanism whereby the federal government can provide financial sponsorship to major infrastructure programs that meet the criteria of the act. The proposed Capital Beltway HOT-Lane project meets the criteria of the act on all counts and is closely aligned with the stated objectives of the TIFIA program. USDOT and FHWA have been anxious to demonstrate that this program can be used to help facilitate new toll facilities, though as yet no loans have been extended to a new tolled transportation project.

Under TIFIA, the federal government can extend a loan equal to up to 33 percent of the qualifying project costs at a loan rate equal to the applicable prevailing Treasury bond rate. This implies that as much as \$200 million of the Capital Beltway HOT-Lane project could be funded through a TIFIA loan. Fluor Daniel will submit a letter of interest to FHWA for inclusion of the project in the TIFIA program as soon as this conceptual proposal has been accepted by VDOT. With the anticipated receipt of a record of decision this winter, Fluor Daniel believes that utilization of the TIFIA program would be an enhancement to the plan of finance and can be used without causing any delays in the proposed project development schedule.

# **Governmental Financial Sponsorship**

The conceptual plan of finance for the Beltway HOT lanes supplements project revenue loans with a financial participation by the project's governmental sponsors. The recently enacted legislation that will place a referendum on the November ballot to provide for an additional 0.5 percent sales tax to support transportation improvements in Northern Virginia may provide a mechanism to permit governmental funding for the Capital Beltway HOT-Lane project.

**Tab 3: Project Financing** 3-e Local, State, or Federal Resources

Significantly, the bill specifically listed projects that could be funded from the new sales tax, and one of the listed projects was "I-495 Improvements and Transit Improvements." Given that the HOT-lanes project will permit improved express bus service, the proposed project may qualify for the funding set out in the bill if the referendum were to pass this fall. Our proposed local government financial participation is in an amount less than the \$200 million identified in the recent legislation for improvements to the Capital Beltway.

If the sales tax funding is not available for the Capital Beltway HOT-Lane project, other potential funding sources may include a direct contribution by the Commonwealth, Fairfax County, or the Northern Virginia Transportation Commission. Fluor Daniel will also explore other potential funding sources, including an increase to the capital markets' share of project funding, if the assumed level of local government financial participation proves to be unworkable.